



Chickamauga and Chattanooga National Military Park Traffic Impact Study and Subarea Transportation Plan



Executive Summary

This plan is the culmination of a year-long study of transportation issues and needs in and around the Chickamauga Battlefield Unit of the Chickamauga and Chattanooga National Military Park (CCNMP). The plan is presented in four sections. Section 1 summarizes the plan development phase, which includes data collection, a summary of analyses and major findings as well as the improvement strategy screening process. Section 2 presents the Traffic Impact Study Area recommendations, and Section 3 presents the Battlefield Subarea recommendations. Section 4 concludes with a discussion of additional considerations for the study areas.

A series of technical memoranda were developed to present in greater detail the data collection and analysis phase, identification of area issues and needs, and the improvement strategy development and screening. These memoranda are available in electronic format through the Georgia Department of Transportation (GDOT).

Study Background

Study Areas

Two distinct areas were studied: the Traffic Impact Study area and the Battlefield Subarea. The Traffic Impact Study area covers approximately 58 square miles surrounding the Chickamauga Battlefield Unit of the CCNMP and includes parts of Walker County, Catoosa County and the City of Fort Oglethorpe. The study area is bounded by State Route 193 on the west, Three Notch Road on the east, Cloud Springs Road/State Route 146 on the north and the City of Chickamauga on the south. Portions of the study area are also crossed by the 2000 Census Chattanooga, Tennessee urbanized area boundaries. The Subarea Transportation Plan study area consists of the Chickamauga Battlefield Unit of the CCNMP. The Battlefield Unit covers an area of 5,280 acres or approximately 8.25 square miles.

Purpose

The National Park Service (NPS), using funds provided by the Federal Highway Administration (FHWA), sponsored this study to:

- Evaluate current and future traffic patterns in and around the Chickamauga Battlefield resulting from the completion of the US 27 relocation in Walker County, Georgia
- Determine current and future transportation needs and issues
- Recommend short- and long-term transportation improvements for both study areas that consider impacts on both areas

At the request of the NPS, the Georgia Department of Transportation managed and administered the study. Additional study partners included the Coosa Valley Regional Development Center (RDC) and the Chattanooga Hamilton County North Georgia Area Transportation Planning



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Organization (CHC NGA TPO) as the Metropolitan Planning Organization (MPO). The two study components were closely coordinated to ensure that the final recommendations address the interrelationships between the transportation systems of the Chickamauga Battlefield and the surrounding area.

Public Involvement and Stakeholder Outreach

Public involvement and outreach has been a vital and ongoing element of this study. Study stakeholders including local governments, businesses, local and national historic preservation groups, and the general public provided input and feedback throughout the study through meetings and workshops, newsletters, and a study website.

Public involvement and stakeholder participation opportunities were formally integrated at key milestones in the study. Stakeholder and public feedback has been fully considered in the identification of issues, needs and improvement strategies for both study areas. The public involvement strategy developed at the outset of the study served as the framework for informing and involving stakeholders and the general public during the study.

The public involvement techniques included coordination and outreach with a Project Coordinating Committee (PCC), Stakeholder Participation Panel (SPP), and the public. Primary public involvement tools included meetings, a project website, newsletters, and news articles. Environmental Justice communities were identified and targeted for outreach and participation.

Study Goals

To help guide study development, goals and objectives for the Traffic Impact Study area and Battlefield Subarea were developed in conjunction with the PCC, SPP, and public at the outset of the study. Development of project goals early in the study was important in that these goals and objectives served as a guide for the entire study and were considered throughout each project phase.

Traffic Impact Study area goals

- Ensure that the transportation system meets the mobility needs of the community and region.
- Increase the attraction of the US 27 relocation for through trips (motorists not destined to the Park).

Chickamauga Battlefield Subarea goals

- Minimize adverse impacts of traffic and transportation usage on the Chickamauga Battlefield Unit of the Chickamauga and Chattanooga National Military Park and its resources.
- Develop feasible transportation strategies that will respond to anticipated future growth in the area and in the Park.



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Data Collection and Analysis

An inventory of existing data was created to help gain a thorough understanding of the Traffic Impact Study area and Chickamauga Battlefield Subarea, and the relationships between the two study areas. Primary data collection included traffic counts, a license tag survey, and roadside interview survey to help determine traffic patterns, trip characteristics, and usage in and around the Chickamauga Battlefield.

A primary analysis tool was the Chattanooga MPO's MINUTP travel demand forecasting model which helped to identify existing and future (2025) transportation needs in the study areas. The model was also used to test possible capacity-adding projects and proposed transportation network changes. The MINUTP model was refined for use in this study to provide an accurate representation of travel and transportation characteristics in 2003.

Identified Issues and Needs

In the Traffic Impact Study area, the primary identified needs for the future are:

- Maintaining and providing sufficient mobility and accessibility for north-south and east-west local and regional travel
- Creating mutually beneficial connections between the local area and the Chickamauga Battlefield

In the Battlefield Subarea, the primary identified needs for the future are:

- Maintaining a safe visitor experience on the Battlefield's roadways
- Identifying transportation improvements that minimize negative impacts on the historic, cultural and natural resources of the Chickamauga Battlefield
- Establishing a balance between the need of the National Park Service to fulfill its Congressional mandate with the mobility and accessibility needs of the Traffic Impact Study area

Project Context for Strategy Evaluation

Improvement strategy development for both the Traffic Impact Study area and Battlefield Subarea considered connections and interdependence between the two areas. Actions taken in one area generally impact the other. Major considerations shaping the context within which the study was conducted included:

- Expansion of the Chattanooga urbanized further into Walker and Catoosa Counties
- Fort Oglethorpe economic changes since the US 27 relocation was open to traffic
- Current and future local and regional mobility
- Protection of the Chickamauga Battlefield resources



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- Improving the connection between the Chickamauga Battlefield and gateway resources

Thirty-six improvement strategies were initially proposed for both study areas. Each of the strategies was screened against 15 different criteria. Some strategies were removed from consideration following the screening and stakeholder input. Thirty-one strategies remain in the final Traffic Impact Study and Subarea Transportation Plans.

Traffic Impact Study Recommendations

The 17 strategies in the Traffic Impact Study Plan consist of a broad range of transportation and transportation-related improvements for short- and long-range implementation. Implementation of these strategies will result in benefits to the local area for mobility, accessibility, and potential economic development.

The north-south improvement strategies focus on meeting travel needs within the study area for north-south movements, and the east-west improvement strategies focus on meeting travel needs for east-west movements. The gateway improvements focus on making mutually beneficial connections between the study area and the Chickamauga Battlefield. The recommended Traffic Impact Study area strategies are:

- Extend the US 27 relocation from SR 2/Battlefield Parkway to SR 146/Cloud Springs Road
- Improve intersection at SR 2/Battlefield Parkway and LaFayette Road
- Improve intersection at the US 27 relocation and Osborn Road by allowing safer ingress and egress to the US 27 relocation
- Improve Three Notch Road and Red Belt Road
- Improve shoulders and alignment on Burning Bush Road and provide turning lanes where warranted
- Implement Travel Demand Management program for commuters
- Widen SR 2/Battlefield Parkway from Cedar Lane to I-75 from four to six lanes
- Develop corridor management/access management plan for SR 2/Battlefield Parkway
- Realign Thomas Road west of LaFayette Road and improve signage on Thomas Road and McFarland Gap Road
- Widen SR 146/Cloud Springs Road from LaFayette Road to US 41 from two to four lanes
- Conduct joint land use/transportation study on LaFayette Road corridor between the Chickamauga Battlefield and SR 2/Battlefield Parkway
- Make streetscape improvements on LaFayette Road between the Chickamauga Battlefield and SR 2/Battlefield Parkway and connect to Battlefield visitor center with multi-use path facility
- Improve wayfinding signage to Battlefield from surrounding area
- Develop coordinated wayfinding/signage program for historic sites outside and inside the Park



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- Develop excursion train between Chattanooga Choo-Choo site and City of Chickamauga
- Develop regional auto tour
- Connect to regional trail network

Subarea Transportation Plan Recommendations

The 14 strategies in the Subarea Transportation Plan consist of a broad range of transportation and transportation-related improvements for short- and long-range implementation. Implementation of these strategies will result in benefits to visitor safety, enhanced opportunities for interpretation, and enhanced multimodal opportunities for visiting sites within the Chickamauga Battlefield.

Through the evaluation process, it was realized that not all of the strategies' impacts could be fully assessed in this study; therefore, there are two categories of Subarea recommendations.

- The recommended Subarea strategies were evaluated for their transportation network impacts on the Chickamauga Battlefield Subarea and the Traffic Impact Study area. It was determined that these strategies do not result in transportation network deficiencies in the Traffic Impact Study area and have measurable benefits on the Battlefield Subarea.
- The recommended Subarea strategies for consideration within the CCNMP General Management Plan (GMP) update process were evaluated for their transportation network impacts on the Chickamauga Battlefield Subarea and the Traffic Impact Study area. It was determined that these strategies do not result in transportation network deficiencies in the Traffic Impact Study area and have benefits for the Battlefield Subarea. However, the full impact of these strategies related to Park operations and Park purpose cannot be assessed within this transportation study.

The entire package of recommended Battlefield Subarea improvement strategies are:

- Expand tour route for automobiles - Alexander's Bridge Road to Jay's Mill Road to Brotherton Road to LaFayette Road
- Expand tour route for automobiles - Reed's Bridge Road to Brotherton Road to LaFayette Road
- Make circulation changes on Brotherton Road (one-way westbound), Viniard-Alexander Road (one-way eastbound), and Jay's Mill Road (one-way northbound)
- Close gates at Chickamauga Battlefield entrance locations at Lytle Road, the access road west of Dyer Field, the access road west of the Wilder Brigade Monument, Wilder Road, and Jay's Mill Road
- Expand touring routes for alternative modes
- Develop Park Road Multimodal Functional Classification System that includes design speed, road character/pavement surface type, modal designation and purpose



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- Expand or enhance parking facilities and/or interpretive stations at Alexander's Bridge, Winfrey Field, Brock Field, Wilder Brigade Monument, Jay's Mill, Kelly Field, Viniard Field West, Brotherton Cabin, Longstreet's Headquarters and Reed's Bridge for expanded auto tour route(s)
- Change orientation of and connection to the Chickamauga Battlefield visitor center to McFarland Gap Road from LaFayette Road
- Install new directional signage at major intersections to major historic sites within the Battlefield
- Clarify commercial vehicle standards for Park roads
- Lower speed limit on LaFayette Road
- Lower speed limits on McFarland Gap Road and Reed's Bridge Road
- Develop an alternative transportation/Park shuttle system
- Close gate at Chickamauga Battlefield entrance location on Alexander's Bridge Road

Additional Considerations

If implemented, the 31 recommended strategies for the Traffic Impact Study area and Battlefield Subarea will provide improved mobility and accessibility in the Traffic Impact Study area as well as protect the resources of the Chickamauga Battlefield into the future. However, moving to the implementation stage from this planning stage requires additional strategy refinement to evaluate impacts, develop construction plans, and secure funding. In addition, for any plan to be successful, it must be reexamined and reviewed over time to ensure strategies remain appropriate and meet community needs.

For successful project implementation in both study areas, development of a continuing study area transportation advisory group is suggested. Though the CHC NGA TPO and Coosa Valley RDC have some planning oversight in the area, the issues and needs in the Traffic Impact Study area and Battlefield Subarea are unique. Changes to the transportation system in either area impacts the other. A transportation advisory group would be able to sift through issues and identify ways to find mutually beneficial solutions for the local community and Chickamauga Battlefield.